

A fractal approach to industry sector analysis

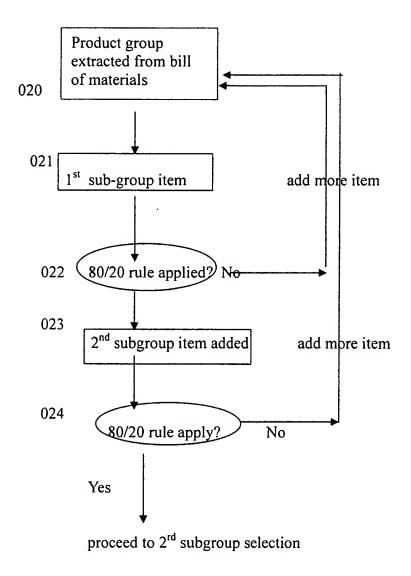


FIG. 2 Application of Pareto's Distribution Law

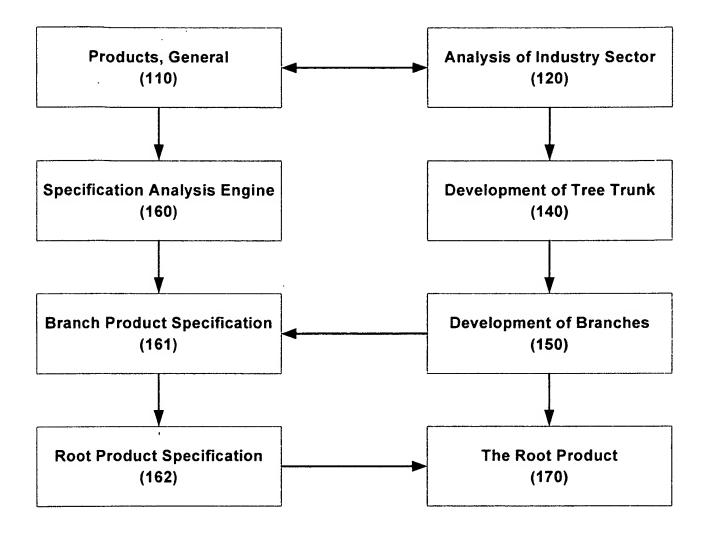


FIG. 3 Root Extraction Process 300

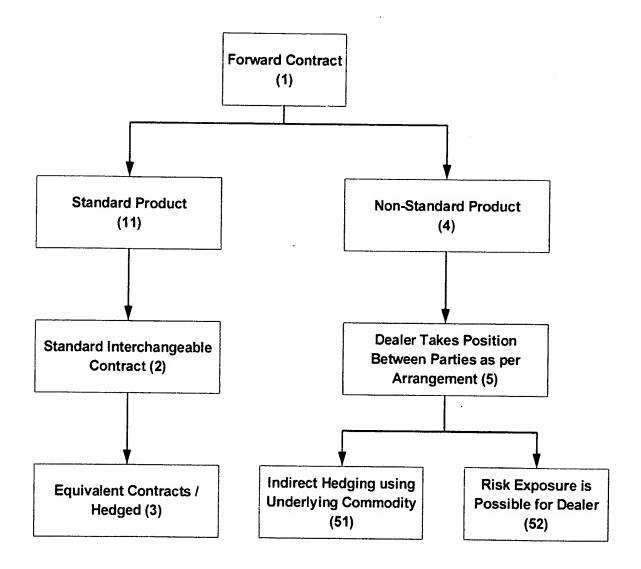
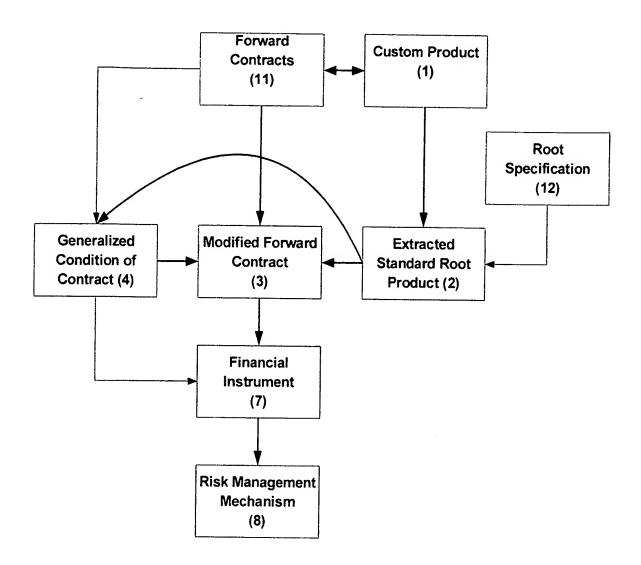
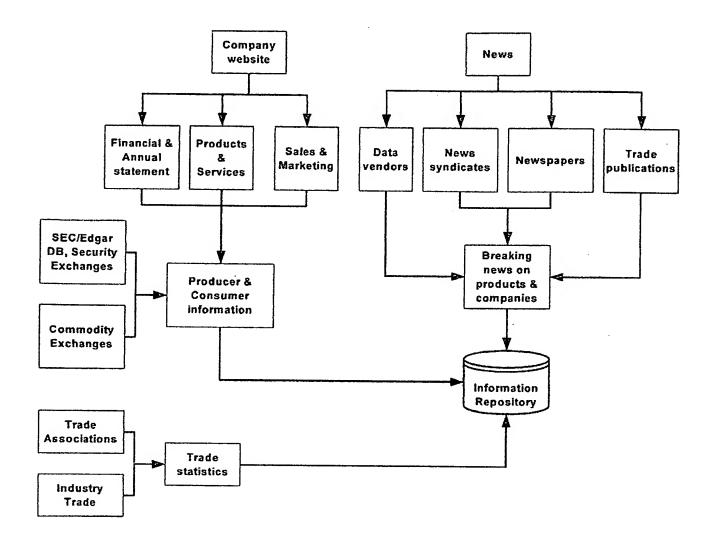


FIG. 4 Existing Forwards Platform 100



Item 1	Product as defined	a) Name (any) b) Description (any)
		c) Unit (no, pounds, ton, gallon, ounce)
		d) lot size(10,100,200, 500, 1000,10000,20000, 50000)
Itam 2	Dal' P	e) code (any)
Item 2	Delivery Frequency	a) date: 30 day, 60 day, 90 day
ļ		b) date: calendar months
		c) notice dates: T-x1, T-x2
Item 3	Trading Rules	a) marketplace (hybrid, futures, spot)
		b) all months
		c) hours (8am-2pm EST), (9am-3pm PST), (11am-5pm
		GMT), (9am-3pm pacific)
		d) week begins (Sunday, Monday)
		e) week ends (Friday)
Item 4	Pricing Mechanism	a) minimum fluctuation (1/100. 1/20, 1/10 of currency)
		b) daily limit (percentage of nominal contract value;5%, 6%,7%,8%,9%,10%),
		c) currency (usd, usd & euro, usd & JPY, usd & local
		currency)
Item 5	Financial Clearing	via Fiduciary account residing at commercial bank
	_	
Item 6	Settlement Procedure	a) cash offset following financial clearing
		b) physical delivery made against cash payment



Public Data Collection

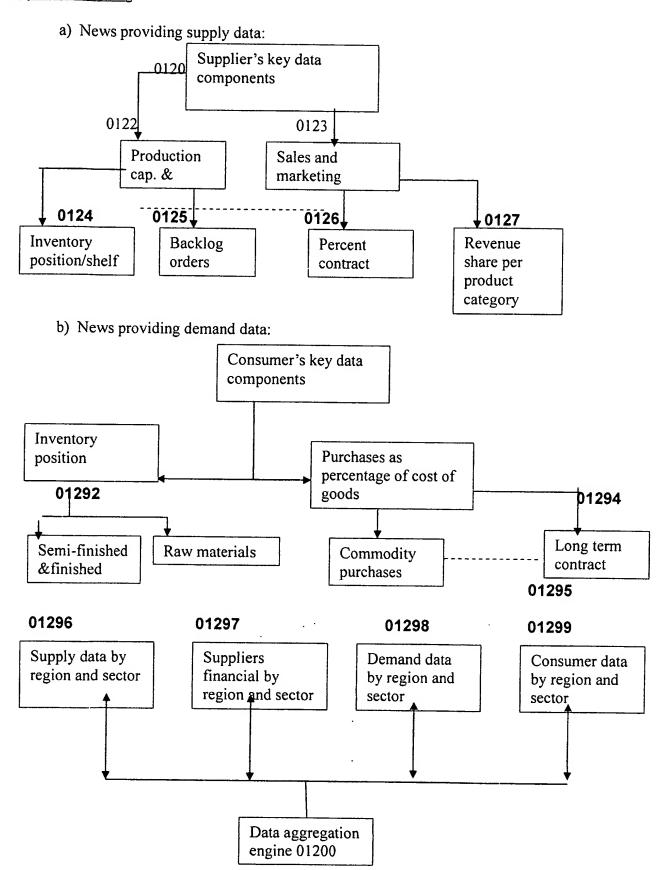
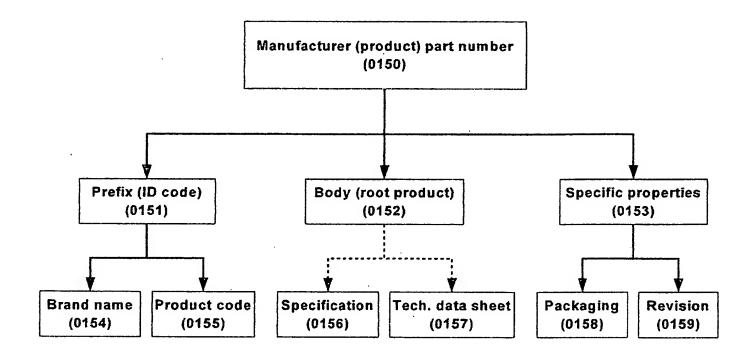
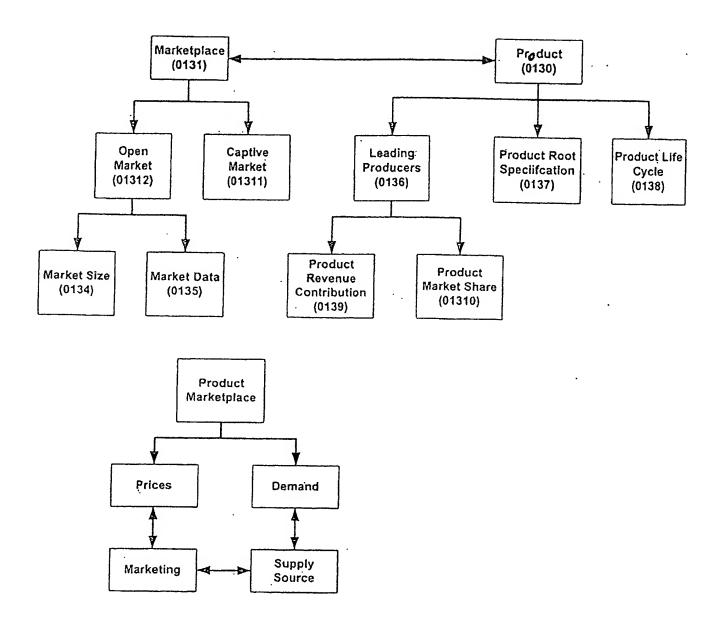


FIG. 8 Supply & Demand data are collected in a database



Breakdown of part number - industry standard

FIG. 9 Manufacturer part number as guide to technical specification



Replacement Drawing

Information	Primary	Secondary	Fee-based
	source	source	services
Product line	Company's	Distributors	
	website	website	
Key	Company's	suppliers	Market
products	financial	websites	researchers
Product	Company's	Trade	Market
market share	report	associations	researchers
Product	Open market	Supplier	Daily survey
prices		website	

FIG. 11 Sources of Data collection

Industry sector	public companies	Market size in 1000	Sub-Sector targeted	Average growth rate	Average Volatility
Electroni	800	450,000,000	Semicon	15%	50%
Chemical	300	350,000,000	plastics	8%	10%
Electrical	56	320,000,000	wholesale	4%	15%

FIG. 12 Example of aggregate marketing data

company	Last quarter/ projected sales	Global market share, 2001	Product 1	Product 2	Cost of sales	International sales
Micron	\$700 million	18.00%	memories	-	80%	400,000
Dell	\$8.5 billion	<10%	memories	interconnec t	35%	2,000,000

FIG. 13 Example of producer and consumer of same product

1. FOR EACH SECTOR

Industry	Public	Market size	Average	Average
	companies		growth rate	volatility

2. FOR EACH PRODUCER/CONSUMER ENTITY

Entity	Last reported revenue	Last reported cost of sales	% commodity related market
			share

Entity	Commodity I, % of revenue	Commodity 2, % of revenue	Commodity 3, % of revenue
Entity	Currency 1 % of	Currency 2 % of	Cumanay 2 0/ of

Entity	Currency 1, % of	Currency 2, % of	Currency 3, % of
	transaction	transaction	transaction

3. FOR EACH PRODUCT

Product	Product	Spot closing	Spot closing	Spot closing
description		1	I . '	in Euro

Product	Product symbol	30 day forward	90 day forward	_
description		closing price	closing price	

Product	Product symbol	Total available	Relative market
description		market	strength

FIG. 14 The Database